

# 13. Improving Nutrient Management in Lawn and Gardens to Protect Water Quality

ZHANG Hailin

Oklahoma State University

## Abstract:

Fertilizers are widely used by homeowners, public parks and golf courses to maintain and improve landscape beauty and quality. However, many homeowners do not soil test before fertilizing their lawn and gardens. Nitrogen, phosphorus and other nutrients in lawn and gardens are often higher than needed for plant growth; especially P, which is often several times higher than typical farmland. The buildup of nutrients may result in more nutrients lost in runoff. The Master Gardener (MG) program is a volunteer training program for consumer. It is a unique opportunity to raise environmental awareness by integrating water quality information into MG training curriculum. We documented nutrient buildup in urban areas, and demonstrated the movement and consequences to MG and lawn care professionals in Oklahoma. A stream model trailer was used to demonstrate available best management practices. A demonstration lawn and garden was established and maintained by local Master Gardeners to further disseminate water quality information to the general public. A majority of the participants have a good understanding of nutrient management for yard maintenance and water quality protection after the training. This presentation will highlight how we documented plant nutrient levels in the urban environment and conducted education programs to minimize non-point source nutrient losses.

Keywords: nutrient loss, best management practice, water quality

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## Information of corresponding author

Full Name: Hailin Zhang

Organization: Oklahoma State University

Mailing address: 368 Agriculture Hall, Stillwater OK 74078 USA

Tel: 00 1 405 744 9566

E-mail: hailin.zhang@okstate.edu